FINISHING CONSTRUCTION WORK

NTQF Level II

Learning Guide =12

Unit of Competence: CARRY OUT DIFFERENT TYPES OF BLOCK WORK

Module Title: CARRYING OUT DIFFERENT TYPES OF BLOCK WORK

LG Code: EIS FCW2 09 1819

TTLM Code: EIS FCW2 M09 TTLM 1819v1

LO 4: Clean up

Instruction Sheet	Learning Guide #09

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

- Reusing, recycling and disposing waste materials
- Maintaining and storing tools and equipment's

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

- Reuse , recycle and dispose waste materials
- Maintain and store tools and equipment's

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 6.
3. Read the information written in the information "Sheet 1, Sheet 2, and Sheet 3 .
4. Accomplish the "Self-check 1, Self-check 2, and Self-check 3 in page -6, 8, 11 respectively.
5. If you earned a satisfactory evaluation from the "Self-check" proceed to "Operation Sheet 1, Operation Sheet 2 and Operation Sheet 3 " in page -13.
6. Do the "LAP test" in page – 14 (if you are ready).

Information Sheet-1	CLEANING WORK AREA

3,1 Introduction Clean up:-

Cleanliness is both the abstract state of being clean and free from dirt, and the process of achieving and maintaining that state.

Cleanliness may be endowed with a moral quality, as indicated by the aphorism "cleanliness is next to godliness, and may be regarded as contributing to other ideals such as health and beauty.

In emphasizing an ongoing procedure or set of habits for the purpose of maintenance and prevention, the concept of cleanliness differs from purity, which is a physical, moral, or ritual state of freedom from pollutants. Whereas purity is usually a quality of an individual or substance, cleanliness has a social dimension, or implies a system of interactions.[2] "Cleanliness," observed Jacob Burckhardt, "is indispensable to our modern notion of social perfection.

"[3] A household or workplace may be said to exhibit cleanliness, but not ordinarily purity; cleanliness also would be a characteristic of the people who maintain cleanness or prevent dirtying.

On a practical level, cleanliness is thus related to hygiene and disease prevention. Washing is one way of achieving physical cleanliness, usually with water and often some kind of soap or detergent. Procedures of cleanliness are of most importance in many forms of construction work.

3.2 **SITE CLEANLINESS AND TIDYNESS**

The Contractor shall perform Daily Cleaning and Weekly Tidying of the Site including the Public Cleaning Areas. The extent of the Public Cleaning Areas required for cleaning shall include, but not limited to, areas within 10 meters on the peripheral outside the barriers or hoardings, or as determined by the Engineer’s Representative on site for each work location based on the requirements of the Contract, and taking into account the actual site condition before work commences.

3.2.**1 Daily Cleanliness**

A. Daily Cleaning shall include cleaning and tidying up after work of tools, equipment, unused materials, storage areas and common areas such as passage ways, daily removal of waste materials from works areas, removal of any rubbish and debris dumped onto the Site by the public and , without derogating from the generality of the foregoing, shall include, but not limited to, all the items subject to checking as listed.
B. The Contractor shall develop inspection checklist for Daily Cleaning for the approval of the Engineers Representative. The inspection checklist shall be reviewed and updated whenever there is a change in work nature or work location and re
Submitted for approval by the Engineer's Representative. The inspection checklist shall include an assessment on the **cleanliness** and tidiness of all work locations, plus the Public Cleaning Areas. Items to be checked against for each work location shall include ,but not limited to, the following:
I . Maintenance of passageways, common accesses and public areas free of obstruction;
ii. Proper storage and stacking of materials;
ii. Proper placement and storage of tools and equipment after work;
iv. Proper sorting, storage and /or disposal of waste materials in accordance with the Waste Management Plan;
v .Proper securing of hoarding, barriers, guarding, lighting and signing of works.
vi. Prevention and removal of water ponds, stagnant water and flooding;
vii. Conditions of cleanliness and tidiness of Site including Public Cleaning Areas in the perspective of the general public; and
viii. Other cleaning requirements as instructed by the Engineer's Representative.
A. "Weekly Tidying" shall include the cleansing and tidying up of the common areas and accesses, cleaning.
-conditioning of hoardings, barriers, guarding, lighting, signage and/or traffic cones, cleansing of external covers for plant and equipment, hoardings, as well as Site as a whole, are clean and tidy in the perspective of the general public and, without derogating from the generality of the foregoing shall include, but not limited to all the items subject to checking the following list.

B .The Contractor shall develop inspection checklist for the Weekly Tidying for the approval of the Engineer's Representative.
The inspection shall be reviewed and updated whenever there is a change in work nature or work location and resubmitted for approval by the Engineer's Representative. The inspection checklist shall include an assessment on the clean lines and tidiness of the site conditions at various work locations, include the Public Cleaning Areas. Items to be checked against each work location shall include, but not limited to, the following:
i. Thorough cleansing of passageways, common accesses and public areas;
ii .Reorganizing of the storage materials for better utilization of
Storage spaces if appropriate;
iii. Maintenance of reconditioning of tools and equipment;
iv. Cleansing of external covers for plant and equipment;
v .Collection and removal of disposed waste materials off site in accordance with the waste management plan;
vi. Cleansing, reconditioning and/or replacement of hoarding,
Barriers, guarding, lighting, and signage of works to good working condition;
vii. Clearing of drains and channels to prevent flooding; and
viii. Other cleansing requirements as instructed by the Engineer
's Representative from the perspective of the general public.

C. The Contractor shall assign a person to inspect the Site after each Weekly Tidying. The assigned person shall check and ensure the cleanliness and tidiness of the Site, complete the inspection checklist, record the areas requiring improvements, and take photographs of areas where cleaning and tidying up works have been done and where improvement actions are required

D .The Contractor shall notify the Engineer's Representative the time schedule for Weekly Tidying and the name of an assigned person responsible for inspection and checking after each Weekly Tidying

.

The Engineer's Representative shall, together with the Site Agent, check and inspect the overall cleanliness and tidiness of the Site on the

Link…list

https://www.youtube.com/watch?v=Gw_tHbFxsvU

https://www.youtube.com/watch?v=DTFynHD8gyw

Self-Check -1	Written Test

Directions: I Multiple choose.

I choose the correct answer from the given on space provided.

----------1---------- Is the process of recycling, recovering of compositions of material? **(3 points)**

A Cleaning or sweeping B Disposing C Recycling D All

----------2 cleaning external covers for plant and equipment includes ?

A barriers B guarding C lighting D all

Note: Satisfactory rating - 3 points Unsatisfactory - below 3 points

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Information Sheet-3	Disposing, reusing and recycling materials

3.1 Disposing, reusing and recycling material debris are disposed

Integrated waste management is a way of tackling wastes through merging different policies of waste management and waste reduction. Waste reduction methods like composting and recycling are also part of integrated waste management systems implementing an integrated system of waste management is quite a complex process. To ensure a correct implementation of the system a comprehensive plan consisting of three priorities is required. The Three Priorities are:

a) Source Reduction, also known as waste prevention, aims at reducing unnecessary waste generation. Source reduction strategies may include a variety of approaches,

b) Recycling and Composting, Recycling is a process that involves collecting, reprocessing and recovering. While, Composting is the conversion of materials that are rich in nutrients to soil additives,

c) Disposal, in particular through the use of landfills and combustion, are the activities undertaken to manage waste materials that are cannot be prevented or recycled.

Construction and demolition debris (C& D) is generated when new structures are built and when existing structures are renovated or demolished. In other words, C & D waste consist of materials that are derived from activities such as; construction, demolition, development of structures, buildings, masonry ,concrete, finishing construction , surface cleaning, systems and remnants of materials such as glass, slabs wood, and Asphalt. These materials are estimated to account for about 50% of the disposed waste stream.
Hazardous waste is defined as anything which, because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, an increase in mortality; or cause an increase in serious irreversible, or incapacitating reversible, illness; or pose a substantial present or potential hazard to human health and the environment when improperly treated, stored, transported, or disposed of. Primary characteristics: ignitability, corrosively, reactivity and toxicity.

link…list
https://www.youtube.com/watch?v=Gw_tHbFxsvU
https://www.youtube.com/watch?v=DTFynHD8gyw

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1---------- Is the process of recycling, recovering of compositions of material? **(3 points)**

A. Cleaning or sweeping B.Disposing C. Recycling D All

2. which types Waste consist of materials that derived from activities?

A Construction B Demolition C dev,t of structures D all

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Name: _____ Date: _____

Short Answer Questions

Score = _____
Rating: _____

1, ---------- 2, ----------

Information Sheet-3	Maintaining tools and equipment’s

3.1 Maintaining tools and equipment:-

Tools and equipment used at the construction site undergo rigorous handling. From initial foundation development, to the final construction of the exterior trim, these tools are exposed to large amounts of dirt and abuse. Proper maintenance of construction tools and equipment is critical to preserving them for future construction jobs. Failure to maintain the tools properly results in unnecessary expense. Clean the construction tools and equipment after each day's work. While a thorough cleaning is not required each day, a general wipe-down and removal of the heaviest construction dirt is key to extending the life of the tools. Lubricate air tools and pneumatic equipment before each day's use. Condensation in the airline creates an environment for corrosion inside pneumatic tools. Coating the internal components of these tools with air-tool oil will displace the moisture and prevent tool corrosion. Inspect and repair all construction equipment and tools at the completion of each job. Make all repairs to the equipment that are necessary for future construction work. This will prevent time being wasted repairing faulty equipment at future construction job sites.
performing good housekeeping**:-**

- **Why should we pay attention to housekeeping at work?**

  Effective housekeeping can eliminate some workplace hazards and help get a job done safely and properly. Poor housekeeping can frequently contribute to accidents by hiding hazards that cause injuries. If the sight of paper, debris, clutter and spills is accepted as normal, then other more serious health and safety hazards may be taken for granted.

- **What is the purpose of workplace housekeeping?**
-
- Poor housekeeping can be a cause of accidents, such as**:**

- ✓ tripping over loose objects on floors, stairs and platforms
- ✓ being hit by falling objects
- ✓ slipping on greasy, wet or dirty surfaces
- ✓ striking against projecting, poorly stacked items or misplaced material
- ✓ Cutting, puncturing, or tearing the skin of hands or other parts of the body on projecting nails, wire or steel strapping to avoid these hazards, a workplace must

"maintain" order throughout a workday. Although this effort requires a great deal of management and planning, the benefits are many.

- **Effective housekeeping results in:**

- reduced handling to ease the flow of materials
- fewer tripping and slipping accidents in clutter-free and spill-free work areas
- decreased fire hazards
- lower worker exposures to hazardous substances (e.g. dusts, vapors)
- better control of tools and materials, including inventory and supplies
- more efficient equipment cleanup and maintenance
- better hygienic conditions leading to improved health
- more effective use of space
- reduced property damage by improving preventive maintenance
- less janitorial work improved morale
- improved productivity (tools and materials will be easy to find)

Refer……LIST

https://www.youtube.com/watch?v=65jYtUMLl2E
https://www.youtube.com/watch?v=MYp6fOn01HM
https://www.youtube.com/watch?v=ZrSU9-r9qB8
https://www.youtube.com/watch?v=4jCxBcgLGPU

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1 A poor housekeeping can be cause of accident (3 points)

A cutting skin B puncturing C Tearing the skin D all

2 list out the advantages house keeping at least 3

Note: Satisfactory rating - 3 points Unsatisfactory - below 3 points

Answer Sheet

Name: _____ Date: _____

Short Answer Questions

Score = _____

Rating: _____

1._____

2 a,---------- b---------- c----------

Operation Sheet 1	Cleaning finished pointer

Techniques for Cleaning finished pointer:

Step 1- wear PPE.
Step 2- select required tools and materials
Steps3- clean the pointer with clean water.
Step 4- scribe dirty things like waste and rubbish 0f mortars for 10-20 minutes.
Step 5 - seal the surface by applying impregnator for 15 minutes.

Operation Sheet 2	Reusing, recycling and disposing waste materials Techniques

Techniques for Cleaning finished Pavers:

Step 1- select required tools and equipment.
Step 2- collect broken bricks for recycling.
Steps 3- break down these bricks until it become mortars putty limes.
.

LAP Test	Practical Demonstration

Name: _____ Date: _____
Time started: _____ Time finished: _____
Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within 4 hour.
Task 1. Clean the paver
Task 2. Recycle broken bricks for 10mm size of aggregates.
Task 4. Store tools and equipment depends 5s standard.

ANSWER KEY OF SELF CHECK LEARNING OUT COME (LO1)

Unit competence name	**Carry out different types block work**	**MO**
Learning out come	**CLEAN UP**	**LO3**
	Choice	**Matching**
Self- check 1	**1 D ,2 D 3**	
Self -check 2	**1 D , 2 B**	
Self- check 3		
Self -check 4		
Self-check 5		
Self-check 6		

Information list and names of provider

No	Name of trainer	Qualification	Region	E-mail
1	Desalgn Teshome	BSC in Building Construction Technology	Oromia	desute17@gmail.com
2	Gezu Bedane	BSC in Building Construction Technology	Addis Ababa	Geze Badhane@gmail.com
3	Habtamu Abayneh	BSC in Building Construction Technology	SNNPRS	Habtishzeget05@gmail.com
4	Mihiretab Gashaw	BSC in Building Construction Technology	Addis Ababa	mihiretabgashaw@gmail.com
5	Shikure Tahir	BSC in Building Construction Technology	Somalie	Shikuretahir09@gmail.com
6	Tenagnework Kebede	BSC in Building Construction technology	Amhara	tenagnekebede@gmail.com
7	Zelalem Adugna	BSC in Building Construction Technology	Dire Dawa	Zola.za@73gmail.com